



# SystemC CCI WG Preset Values Superset

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# Preset Values Superset

- **Objective of the present example is to demonstrate the following :**
  - Detecting Unconsumed Parameters (R3.1) existing in a model

# Example Illustration (1)

## main.cpp (testbench file)

Use the configuration file approach for assigning preset values to the cci-parameters.  
(For further details, see ex17\_Specifying\_Parameter\_Values\_via\_a\_Configuration\_File)

```
cci::cnf::cci_configFile_Tool configTool("configFileTool");  
configTool.config("Configuration_File.txt");
```

```
param_owner.int_param_1    100  
param_owner.int_param_2    200  
param_owner.int_param_3    300  
param_owner.int_param_4    400
```

Configuration\_File

Instantiate the two modules :  
**OWNER** and **CONFIGURATOR** modules

parameter\_owner.h

Instantiate the cci\_parameters :

**Parameter Name** : int\_param\_1; **Default Value** : 10

**Parameter Name** : int\_param\_2; **Default Value** : 20

parameter\_configurator.h

Get handle for broker:

m\_broker(cci::cci\_get\_broker())

# Example Illustration (contd.. 1)

parameter\_owner.h



parameter\_configurator.h

Use *get\_param\_handles()* to retrieve list of all cci-parameters within model. Store result in a std::vector:

```
complete_parameter_list = m_broker.get_param_handles();
```

Within end\_of\_elaboration phase

Obtain list of unconsumed preset values:

```
unconsumed_parameter_list =  
m_broker.get_unconsumed_preset_values();
```

@ 0 ns

Display the list of parameter names for which there are unconsumed preset values:

```
param_owner.int_param_3  
Param_owner.int_param_4
```



# Expected Output

## (ex18\_Preset\_Values\_Superset.log)

SystemC Simulation

ConfigFile\_Api: Applying preset value of param 'param\_owner.int\_param\_1' to '100'

ConfigFile\_Api: Applying preset value of param 'param\_owner.int\_param\_2' to '200'

ConfigFile\_Api: Applying preset value of param 'param\_owner.int\_param\_3' to '300'

ConfigFile\_Api: Applying preset value of param 'param\_owner.int\_param\_4' to '400'

Info: sc\_main: Begin Simulation.

Info: param\_cfgr: @0 s, [CFGR within EOE] : List of all parameters in the model

Info: param\_cfgr: @0 s, [CFGR within EOE] : Parameter Name : param\_owner.int\_param\_1

Info: param\_cfgr: @0 s, [CFGR within EOE] : Parameter Name : param\_owner.int\_param\_2

Info: param\_cfgr: @0 s, [CFGR] : List of parameter names with unconsumed preset values

Info: param\_cfgr: @0 s, [CFGR] : Unconsumed Parameter Name : param\_owner.int\_param\_3

Info: param\_cfgr: @0 s, [CFGR] : Unconsumed Parameter Name : param\_owner.int\_param\_4

Info: sc\_main: End Simulation.